

Work Order ID 79843

79843

Page 1

February 6, 2012 8:15:35 AM

Item ID: D407-558-047

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 2/06/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 2/10/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: CL Date: 12/02/06 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

DSI 9436

A

SP

Pro →

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D407-558-047 and DSI9436
CHG002

S 12/02/06

J. J. M. 12-2-6 (5)

110

0.00

110

Small Fab

Small Fab

Memo

0.00

Small Fab

1- assemble as per dwg D206-558

E 12/02/07 (5)

120

0.00

120

QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

S 12/02/07

(5)

Dart Aerospace Ltd

W/O: 79843		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D47-58047 PAR #: Fault Category: Prod Eng NCR: Yes No DQA: Date: 12/2/14
 Resolution: Remark Disposition: Remark QA: N/C Closed Date: 12/2/14

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/2/14	130	Missing Parts in Pick list to LZW Instruct. R.C. w/o + Bom not updates correctly	CP 12-01-14 OS/10/12	ADD Parts to Kit D2053 B MS35469-673 1193	CP 12-02-14	S 12/2/14	CP 12-02-14 OS/10/12	S 12/2/14
			CP 12-02-14	update Bom + w/o add copy of updated Bom for Ref.	12-02-14	S 12/2/14	CP 12-02-14	S 12/2/14

NOTE: Date & initial all entries

Work Order ID 79843

79843

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February 6, 2012 8:15:35 AM

Item ID: D407-558-047 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Dual Cargo Mirror Assembly, 6 inch Round
 Start Date: 2/06/12 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 2/10/12 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Packaging Packaging	Pick Kit Memo	0.00 0.00							SP 12-02-06
140 *140* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00							SP 12/02/09
150 *150* Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPP D407-588-047 and DSI9436 Location: _____ PPP Rev: <u>A</u>	0.00 0.00							SP 12-02-08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 79843***79843***

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February 6, 2012 8:15:35 AM

Item ID: D407-558-047

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 2/06/12 Start Qty: 5.00

5

Cust Item ID:

Required Date: 2/10/12 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

[Handwritten signature] M.L.J. 12/02/09

M.L.J. 12/02/09
(5)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February 6, 2012 8:15:35 AM

Page 1

Work Order ID: 79843

Parent Item: D407-558-047

Parent Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 2/06/12

Required Date: 2/10/12

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A 09-01-16 new issue DD verified by:ec
chg002 DD VERF:EC

IPP REV:B 11.01.19 AS PER

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3-4A Bolt		Purchased	No				Each	446.0000	1	SP ²⁰			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST350		446							
				104291		66			20x				
				104625		300							
				120308		80							
AN526-1032R9 Screw		Purchased	No				Each	68.0000	1	SP ²⁰			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST348		68							
				114382		4							
				116900		4							
				117395		60			20x				
AN960JD10L Washer	NAS1149D0332J	Purchased	No				Each	0.0000	1	SP ³⁰			
D2011-101 6" Mirror		Manufactured	No		#110		Each	31.0000		SP ¹⁰			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST226		31							
				75983		31			10x				
D2053 Mounting Bracket		Manufactured	No		#110		Each	22.0000		SP			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST004		22							
				58395		1							
				71595		21			5x				
D2066 Arm		Manufactured	No		#110		Each	0.0000		SP			

SP12-02-06

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

February 6, 2012 8:15:35 AM

Work Order ID: 79843

Parent Item: D407-558-047

Start Date: 2/06/12

Required Date: 2/10/12

Parent Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Qty: 5.00

Required Qty: 5.00

D2067 Connector
S 45

Manufactured No

Each 30.0000

[X] SP⁵

Location	Loc Qty	Loc Code
ST004	30	
70066	30	

D2071-3 Cable
S 45

Manufactured No

Each 14.0000

[X] 5x SP

Location	Loc Qty	Loc Code
ST222	14	
64745	1	
73054	13	

D3778-1 Bracket
S 45

Manufactured No

Each 8.0000

[X] 5x SP⁵

Location	Loc Qty	Loc Code
ST228	8	
71205	8	

MS21042L3 Nut
S 45

Purchased No

Each 5,123.0000

[X] 5x SP⁵

Location	Loc Qty	Loc Code
ST300	5123	
117441	16	
117885	32	
118451	5	
118927	3	
119017	4657	
119075	410	

MS21919-DG5 Clamp
S 45

Purchased No

Each 53.0000

[X] SP¹⁰ 12-02-06.

Location	Loc Qty	Loc Code
ST306	53	
118840	3	
119638	25	
120498	25	

3x 7x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

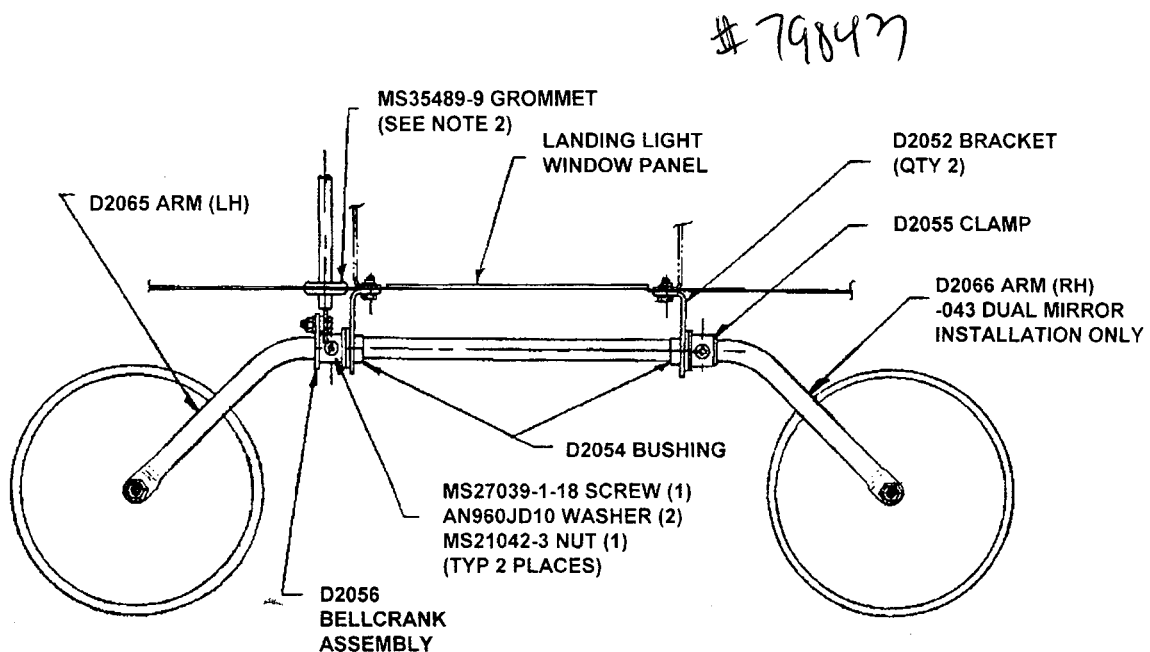


Figure 25.2 – View A: Looking Aft.
(D206-558-043 Mirror Shown)

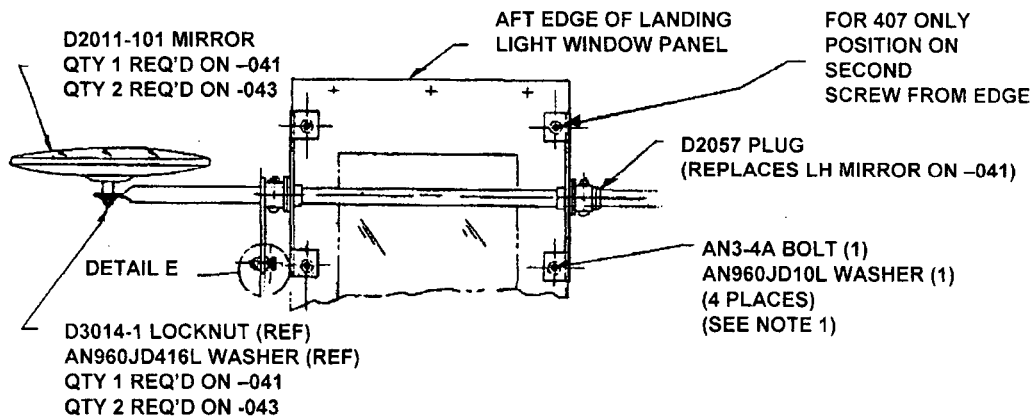


Figure 25.3 – View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

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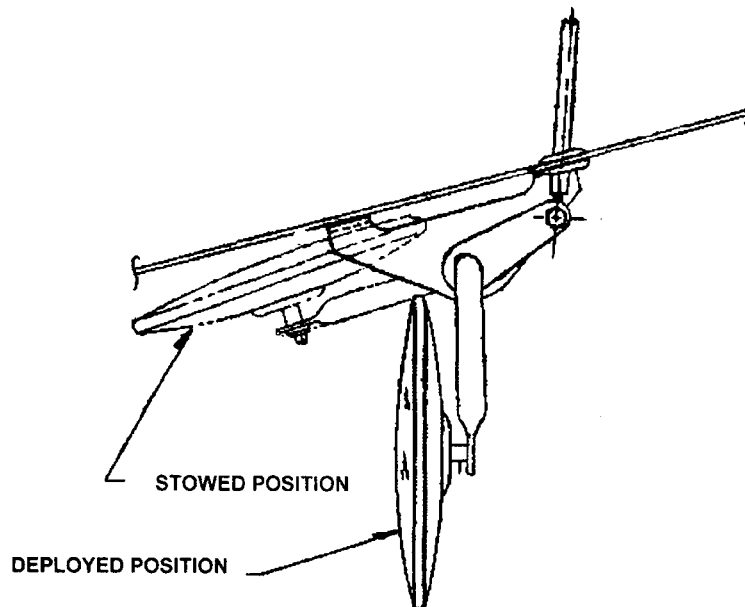


Figure 25.4 – Detail D: Looking from Side on Mirror Installation
(D206-558-041/-043 Mirror Shown)

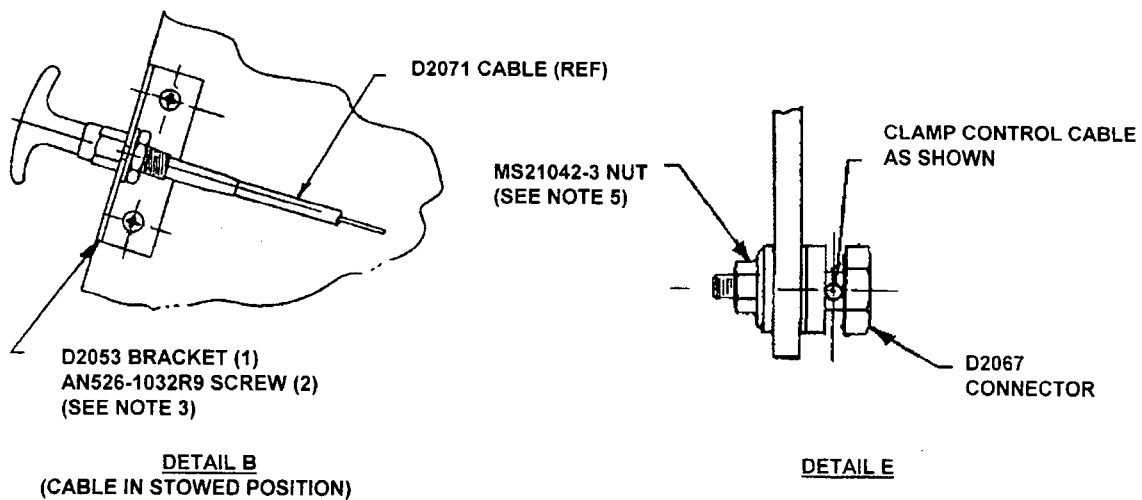


Figure 25.5 – Details B and E on Mirror Installation
(D206-558-041/-043 Mirror Shown)

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REFERENCE ONLY

FROM THIS POINT FORWARD, CUSTOMERS SHOULD ORDER D407-558-045/-047 IN LIEU OF D206-558-041/-043 WHEN PROCURING SINGLE/DUAL MIRRORS FOR BHT 407 MODELS. AMEND SECTIONS 4.0 AND 5.0 OF INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER AND 25.3 AND 25.4 OF ICA-D206-558 REV. 0 AS FOLLOWS:

4.0 WEIGHT AND BALANCE (D206-558 REV. C OR EARLIER)

25.3 WEIGHT AND BALANCE (ICA-D206-558 REV. 0)

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 206A/B/L/L1/L3/L4	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D206-558-043	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 206A/B/L/L1/L3/L4	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg
D407-558-045	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 407	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D407-558-047	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 407	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg

5.0 PARTS LIST (D206-558 REV. C OR EARLIER)

25.4 PARTS LIST (ICA-D206-558 REV. 0)

Qty -041	Qty -043	Qty -045	Qty -047	Part Number	Description
X				D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X			D206-558-043	DUAL CARGO MIRROR ASSEMBLY
		X		D407-558-045	SINGLE CARGO MIRROR ASSEMBLY
			X	D407-558-047	DUAL CARGO MIRROR ASSEMBLY
1	2	1	2	D2011-101	MIRROR ASSEMBLY
2	2	2	2	D2052	BRACKET
1	1	1	1	D2053	BRACKET
2	2	2	2	D2054	BUSHING
1	1	1	4	D2055	CLAMP
1	1	1	4	D2056	BELLCRANK ASSEMBLY
1		1		D2057	PLUG
1		1		D2065	ARM
	1		1	D2066	ARM
1	1	1	1	D2067	CONNECTOR
1	1			D2071	CABLE ASSEMBLY
		1	1	D2071-3	CABLE ASSEMBLY
1	2	1	2	D3014-1	* LOCKNUT
1	1	1	1	D3778-1	BRACKET
4	4	4	4	AN3-4A	BOLT
4	4	4	4	AN526-1032R9	SCREW
1	2	1	2	AN960JD416L	* WASHER
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD10L	WASHER
3	3	3	3	MS21042-3	NUT (or MS21042L3) -Z
2	2	2	2	MS21919DG5	CLAMP
2	2	2	2	MS27039-T-18	SCREW
1	1			MS35489-9	GROMMET
		1	1	MS35489-67	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 08.12.04
CERT. NO.: SH92-17
ISSUE NO.: 7

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		DSI 9436	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		CABLE CHANGE	NTS
DATE 08.12.04		COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Item ID: D407-558-047

BOM Type: Production

Status	Item ID	Rev	Name	Start Date	Quantity	Pe	UOM	Scrap %	Route Seq	If	Sort	Comments	Date	Last Mod	Stop Date
	D2067		Connector	12/5/2009	1.0000		Each	0 %			0		1/19/2011 8:...		
	D2011-101		6" Mirror	12/5/2009	2.0000		Each	0 %			0		1/19/2011 8:...		
	D2053		Mounting Bracket	12/5/2009	1.0000		Each	0 %			0		1/19/2011 8:...		
	AN3-4A		Bolt	6/24/2009	4.0000		Each	0 %			0		1/19/2011 8:...		
	D3778-1		Bracket	12/5/2009	1.0000		Each	0 %			0		1/19/2011 8:...		
	D2066		Arm	12/5/2009	1.0000		Each	0 %			0		1/19/2011 8:...		
	AN526-1032R9		Screw	6/24/2009	4.0000		Each	0 %			0		1/19/2011 8:...		
	MS21919-DG5		Clamp	6/24/2009	2.0000		Each	0 %			0		1/19/2011 8:...		
	D2071-3		Cable	12/5/2009	1.0000		Each	0 %			0		1/19/2011 8:...		
	MS21042L3		Nut	6/24/2009	1.0000		Each	0 %			0		1/19/2011 8:...		
	AN960JD10L		Washer	6/24/2009	6.0000		Each	0 %			0		1/19/2011 8:...		
	MS35489-67		GROMMET	2/10/2012	1.0000		Each	0 %			0				